

CLAIM AMENDMENTS

1. (canceled)

1 2. (currently amended) The sun-position follow-up means
2 tracking system according to claim 17 ~~, characterized in that~~
3 wherein the sector gear (25) covers extends over an arc of about
4 120°.

3 and 4. (canceled)

1 5. (currently amended) The sun-position follow-up means
2 tracking system according to ~~one of the preceding claims,~~
3 ~~characterized in that it includes on the whole four members (11,~~
4 ~~19) fixedly connected to the rotary plate (4) of which claim 17~~
5 wherein the plurality of fixed rods includes [[the]] two outer ones
6 ~~(11) are rods~~ pivotally connected to ~~a pivot member (13) the frame~~
7 and [[the]] two inner ones ~~(19) are connected to the pivot member~~
8 ~~(20) including rods between the outer rods, flanking the sector~~
9 gear [(25)] , and carrying the pivot drive means.

6. (canceled)

1 7. (currently amended) The sun-position follow-up means
2 tracking system according to ~~one of the preceding claims,~~
3 ~~characterized in that~~ claim 17 wherein the rotary plate ~~[(4)]~~ is
4 rotatably supported on the base ~~(1, 2, 3)~~ by means of balls ~~[(6)]~~
5 ~~arranged within~~ riding in an annular groove ~~[(5)]~~.

1 8. (currently amended) The sun-position follow-up means
2 tracking system according to ~~one of the preceding claims,~~
3 ~~characterized in that~~ claim 17 wherein the base ~~(1, 2, 3)~~ consists
4 of a bottom plate ~~[(1)]~~, a housing ~~(2)~~ arranged mounted thereon
5 and a fixed plate ~~(3)~~ arranged mounted thereon for the supporting
6 ~~[[of]]~~ the rotary plate ~~[(4)]~~.

1 9. (currently amended) The sun-position follow-up means
2 tracking system according to ~~one of the preceding claims,~~
3 ~~characterized in that~~ claim 17 wherein the rotary drive ~~[[has]]~~
4 means includes a motor ~~[(16)]~~, a reducing transmission ~~[(15)]~~
5 and a drive screw ~~(9)~~ ~~which is in engagement~~ meshing with a drive
6 gear ~~[(8)]~~ for the rotary plate ~~[(4)]~~.

1 10. (currently amended) The sun-position follow-up
2 means tracking system according to ~~one of the preceding claims,~~
3 ~~characterized in that~~ claim 8 wherein the rotary drive and the
4 control unit ~~(10)~~ means are arranged mounted in the housing ~~[(2)]~~
5 of the base.

1 11. (currently amended) The sun-position follow-up
2 means tracking system according to ~~one of the preceding claims,~~
3 ~~characterized in that claim 17 wherein the optosensor optical~~
4 sensor ~~[(14)]~~ includes
5 a sensor base ~~[(100)]~~,
6 ~~a separation means (200) arranged upstanding partitions~~
7 on the sensor base ~~[(100)]~~ and dividing ~~[[the]]~~ a space above the
8 sensor base ~~[(100)]~~ into a plurality of upwardly and laterally
9 open compartments ~~[(160)]~~,
10 a respective ~~t-least-one~~ light-receiving means ~~[(300)]~~
11 in ~~[[every]]~~ each compartment ~~[(160)]~~ which converts light into
12 electrical current, and
13 electrical lines ~~(400, 500)~~ connected to ~~[[said]]~~ the
14 light-receiving means ~~[(300)]~~ and extending to a
15 control/evaluating/indicating unit ~~[(700)]~~.

1 12. (currently amended) The sun-position follow-up
2 means tracking system according to claim 11, ~~characterized in that~~
3 ~~wherein the separation means (200) divides partitions divide the~~
4 space above the sensor base ~~[(100)]~~ into four of the compartments
5 ~~[(160)]~~.

1 13. (currently amended) The sun-position follow-up
2 means tracking system according to claim 11 or 12, ~~characterized in~~
3 ~~that wherein a~~ respective light-receiving means (300) is arranged
4 in ~~[[every]]~~ each of the compartments ~~[(160)]~~.

1 14. (currently amended) The sun-position follow-up
2 means tracking system according to ~~one of the claims claim~~ 11 to
3 ~~13, characterized in that the wherein each~~ light-receiving means
4 ~~[(300)]~~ is a photodiode.

1 15. (currently amended) The sun-position follow-up
2 means tracking system according to ~~one of the claims claim~~ 11 to
3 ~~14, characterized in that wherein it includes a the sensor~~ base
4 ~~[(100)]~~ is approximately square in horizontal section and a
5 ~~separation means (200) with walls arranged the partitions~~ along
6 ~~[[the]]~~ diagonals of the sensor base ~~[(200)]~~.

16. (canceled)

1 17. (new) A sun-position tracking system for a solar
2 module, the system comprising:

3 a base;

4 a rotary plate rotatable on the base about an upright
5 plate axis;

6 rotary drive means for rotating the plate on the base
7 about the upright plate axis;

8 a plurality of generally parallel fixed rods fixed to the
9 plate and having outer ends extending outward past the plate;

10 a substantially planar frame pivoted on the rod outer
11 ends about a generally horizontal frame axis between a down

12 position with the frame lying on and substantially parallel to the
13 plate and an up position extending at an acute angle to the plate,
14 the solar module being carried on the frame and lying in a panel
15 plane above the rods and plate;

16 a sector gear fixed to the frame outside the outer edge
17 of the plate and wholly below the plane;

18 pivot drive means mounted on the rod outer ends and
19 wholly below the plane and connected to the sector gear for
20 pivoting the frame between its positions;

21 an optical sensor mounted on the frame and responsive to
22 sunlight; and

23 control means connected to the optical sensor and to the
24 rotary and pivot drive means for orienting the frame and the solar
25 module thereon with respect to the sun.

1 18. (new) The sun-position tracking system defined in
2 claim 17 wherein the pivot drive means further comprises, all
3 mounted below the plane between the two fixed rods,:

4 a motor;

5 a speed-reducing transmission connected to the motor;

6 a toothed output connected through the transmission to
7 the motor and meshing with the sector gear.